

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

Claim 1. (Currently amended) A method for optical wireless communication, comprising the steps of:

receiving a source data signal having data;

creating a set of temporally distinguishable transmission signals;

converting the set of temporally distinguishable transmission signals to obtain

~~corresponding~~ a corresponding set of temporally and optically distinguishable light signals, each light signal having a modulation representation of the data from the source data signal and a respective optical characteristic; and

transmitting the set of temporally and optically distinguishable light signals in a single output transmission beam through a turbulent medium, whereby[[,]] the set of light signals can pass through uncorrelated channels in the [[a]] turbulent medium.

Claim 2. (Cancelled).

Claim 3. (Currently amended) The method of claim 1, wherein said set of temporally and optically distinguishable light signals comprise a set of delayed, diverse light signals, and wherein:

said creating step comprises the steps of creating at least one duplicate of the source data signal and delaying the created duplicate signal to obtain the set of

temporally distinguishable transmission signals having a non-delayed transmission signal and at least one delayed transmission signal; and

said converting step comprises the step [[steps]] of generating a set of delayed, diverse light signals in response to the set of temporally distinguishable transmission signals, wherein the set of delayed, diverse light signals includes a first light signal corresponding to the [[a]] non-delayed transmission signal and at least a second light signal corresponding to the at least one delayed transmission signal.

Claim 4. (Currently amended) The method of claim 1, further comprising the steps of :

receiving the single output transmission beam after it has passed through a turbulent medium;

detecting temporally distinguishable light signals within the received single output transmission beam to obtain corresponding temporally distinguishable data signals;

temporally adjusting each temporally distinguishable data signals obtained in ~~obtained in~~ said detecting step; and

logically evaluating bits in each of said temporally adjusted temporally distinguishable data signals to obtain a single output data signal.

Claim 5. (Currently amended) A system for optical wireless communication, comprising:

means for receiving a source data signal having data;

means for creating a set of temporally distinguishable transmission signals;

means for converting the set of temporally distinguishable transmission signals to obtain ~~corresponding~~ a corresponding set of temporally and optically distinguishable light signals, each light signal having a modulation representation of the data from the source data signal and a respective optical characteristic; and

means for transmitting the set of temporally and optically distinguishable light signals in a single output transmission beam through a turbulent medium, whereby[[,]] the set of light signals can pass through uncorrelated channels in the [[a]] turbulent medium.

Claim 6. (Cancelled).

Claim 7. (Currently amended) The system of claim 5 [[6]], wherein said set of temporally distinguishable light signals comprise a set of delayed, diverse light signals, and wherein:

said creating means comprises means for creating at least one duplicate of the source data signal and delaying the created duplicate signal to obtain the set of temporally distinguishable transmission signals having a non-delayed transmission signal and at least one delayed transmission signal; and

said converting means comprises means for generating a set of delayed, diverse light signals in response to the set of temporally distinguishable transmission signals, wherein the set of delayed, diverse light signals includes a first light signal

corresponding to the [[a]] non-delayed transmission signal and at least a second light signal corresponding to the at least one delayed transmission signal.

Claim 8. (Currently amended) The system of claim 5 [[6]], further comprising:

means for receiving the single output transmission beam after it has passed through a turbulent medium;

means for detecting temporally distinguishable light signals within the received single output transmission beam to obtain corresponding temporally distinguishable data signals;

means for temporally adjusting each temporally distinguishable data signals obtained in said detecting step; and

means for logically evaluating bits in each of said temporally adjusted temporally distinguishable data signals to obtain a single output data signal.

Claim 9. (New) An apparatus for optical wireless communications, comprising:

a data source that provides a first set of data signals that are identical;

a data delay device that delays a data signal in the first set of data signals to produce a second set of temporally distinguishable data signals;

a set of light sources that modulate the second set of temporally distinguishable data signals to produce a corresponding set of temporally distinguishable optical signals,